



(19)

(11) Publication number:

0

Generated Document.

PATENT ABSTRACTS OF JAPAN(21) Application number: **02213875**(51) Intl. Cl.: **H03G 3/10 H03G 3/30**(22) Application date: **13.08.90**

(30) Priority:

(43) Date of application publication: **27.03.92**

(84) Designated contracting states:

(71) Applicant: **NEC CORP**(72) Inventor: **HAMADA AKIRA**

(74) Representative:

**(54) VARIABLE GAIN
AMPLIFIER**

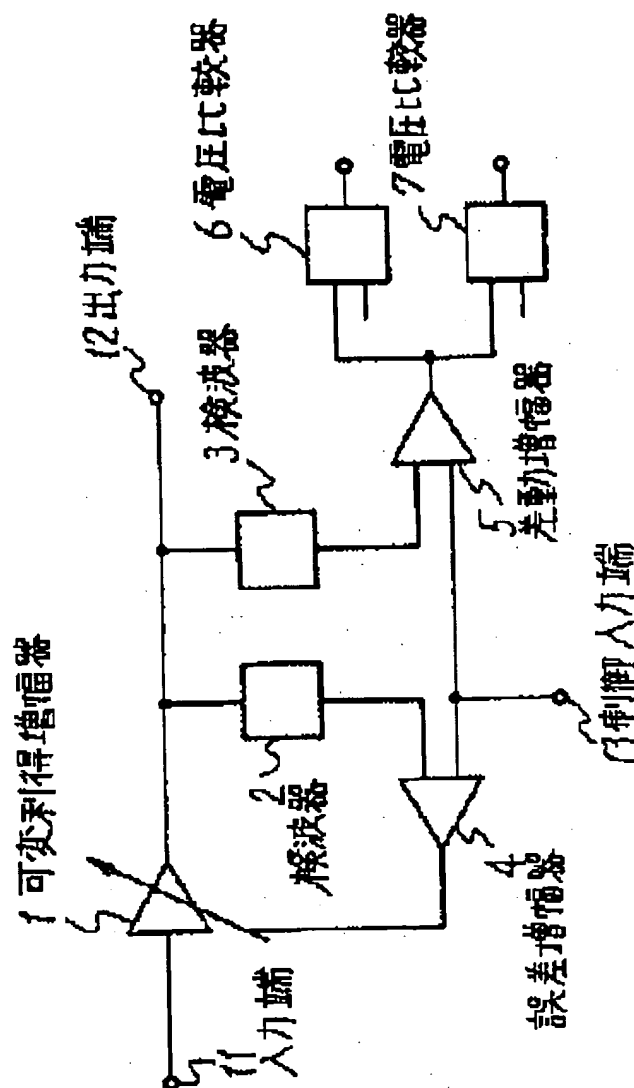
(57) Abstract:

PURPOSE: To realize fault detection when a desired output level exceeds a threshold level by providing a detector to an output terminal of a variable gain amplifier and monitoring an output of a differential amplifier being an amplified output between the detected voltage and a gain control voltage so as not to exceed an upper limit and a lower limit threshold level.

CONSTITUTION: A detector 3 is provided to an output terminal 12, a difference between the detected voltage and a control voltage at a control input terminal 13 is amplified by a differential amplifier 5 and an output voltage of the differential amplifier 5 is monitored. A voltage comparator 6 is provided to the system, which detects a monitored output voltage is larger than a set upper limit threshold voltage. Moreover, a voltage comparator 7 is

provided to the system, which detects a monitored output voltage is smaller than a set lower limit threshold voltage. Thus, the voltage comparators 6,7 are provided to monitor the upper and lower threshold voltages thereby detecting a fault when the threshold voltage is exceeded.

COPYRIGHT: (C)1992,JPO&Japio



BEST AVAILABLE COPY